

A new genus and species of Epipocinae (Coleoptera: Endomychidae) from Pakistan

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A new genus and species of Epipocinae (Coleoptera: Endomychidae) from Pakistan. - *Danascelis elongata* gen. and sp. n. (Coleoptera: Endomychidae, Epipocinae) from Pakistan, is described and illustrated. Notes on Epipocinae are provided.

Key-words: entomology - taxonomy - new genus - new species - Pakistan - Coleoptera - Cucujoidea - Endomychidae.

INTRODUCTION

Epipocinae (=Stenotarsinae) (STROHECKER 1953, LAWRENCE & NEWTON 1995) received very little attention from the taxonomists, since Strohecker's world review and catalogue.

This group of endomychid beetles, like some others of the currently recognized subfamilies of Endomychidae, have been based solely upon overall appearance or combination of characters, and is almost certainly polyphyletic (ŠLIPINŠKI & PAKALUK 1992). The main distinguishing characters used to define this subfamily are brown colour, setose body and broadly bordered lateral margins of pronotum. But there are many exceptions even from this superficial definition. Relationships between currently recognized genera of Epipocinae need more complete and detailed studies, and phylogenetic classification of this diverse group is desperately needed.

In spite of these problems with the current classification of endomychid subfamilies, a new genus is proposed to be included within an expanded Epipocinae, based mainly upon the shape of the male antennal club. This character (9 antennomere greatly enlarged) suggests close relationships with Oriental genus *Tragoscelis* and widely distributed genus *Danae*, which have been classified within subfamily Epipocinae. A new genus is easily separated from the species of genera *Danae* and *Tragoscelis* by following characters: decidedly smaller body, double, oval, deep cavities on sides of pronotal basal sulcus (each cavity with small, oval pit), tarsus distinctly 4-segmented (1 and 2 tarsomeres very weakly flattened), and 3 antennomere not elongate; moreover, *Danascelis* differs from *Danae* by absence of broadly bordered lateral margins of pronotum, and from *Tragoscelis* it differs by having anterior angles of pronotum very weakly produced and rounded.

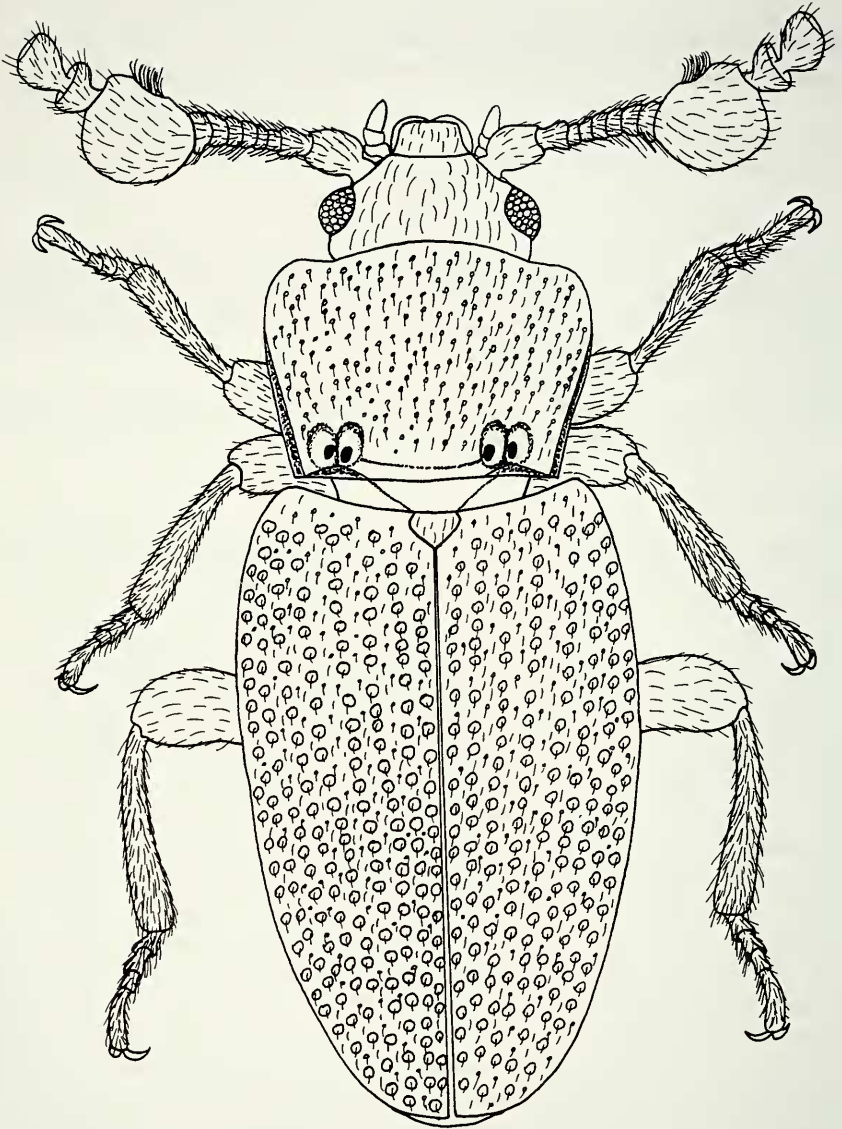


FIG. 1

Habitus of *Danascelis elongata* sp. nov.

Danascelis gen. n.

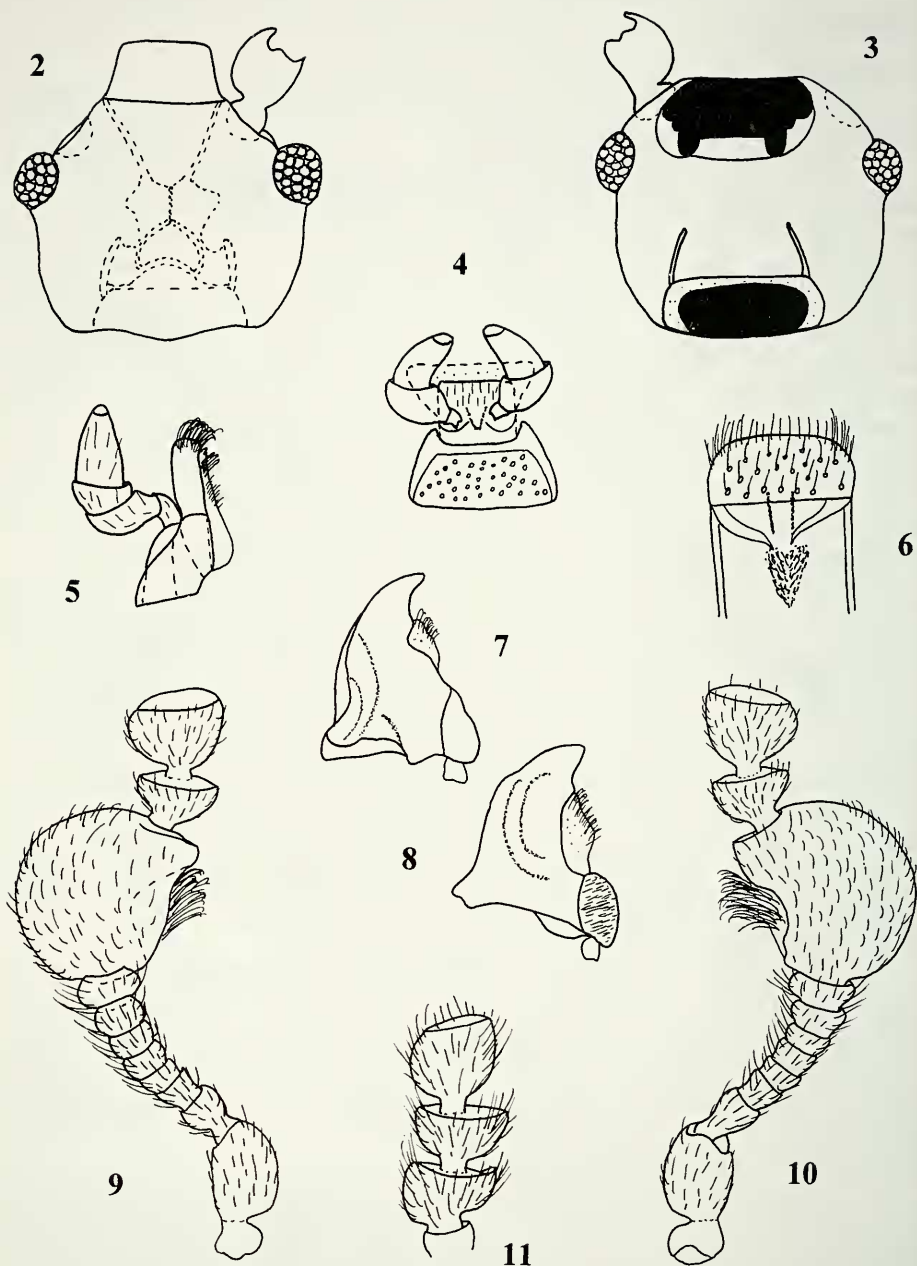
DESCRIPTION

Body elongate (Fig. 1), moderately convex; shiny, covered with fine, short pubescence; distinctly and densely punctured.

Head (Figs 2, 3) prognathous, partially retracted in prothorax, as long as wide; moderately densely and coarsely punctured; gula, genal area and occiput with fine microsculpture. Gular sutures moderately long, weakly convergent anteriorly, widely separated. Eyes placed on sides of head, small, oval, weakly prominent, coarsely faceted. Frontoclypeal suture distinct, straight. Antennal grooves absent; antennal sockets partially visible from above. Antenna reaches posterior pronotal margin, 11-segmented (Figs 9, 10), scape stout, longer than 3 following antennomeres together, pedicel subquadrate, antennomeres 3-8 short, transverse; last three form distinct, densely setose club. In male, first antennomere of the club greatly enlarged, weakly concave, bearing brush of long setae on its inner edge. In female, first and the second antennomeres of the club subequal in size (Fig. 11). Clypeus weakly transverse, flat. Labrum (Fig. 6) transverse, sclerotized, punctured, setose; tormae elongate, with mesal arms recurved posteriorly; labral rods slender, short, parallel. Mandible (Figs 7, 8) short and broad, with single apical tooth; mola moderately large, strongly sclerotized, with fine, transverse ridges; prostheca membranous, covered with short setae on its inner edge; submola very small. Maxilla (Fig. 5) with 4-segmented palp; apical palpomere elongate, tapering, rounded apically. Galea elongate, blunt and covered densely with long setae at apex; about twice as broad as lacinia. Lacinia as long as galea, weakly narrowing towards its apex; with visible digitus, several subapical spines and short setae on its inner edge. Labium (Fig. 4) with 3-segmented palp; terminal palpomere elongate, cylindrical, rounded apically. Mentum trapezoidal, densely punctured. Prementum weakly transverse, sclerotized; ligula submembranous, expanded apically. Submentum small, transverse. Tentorium (Fig. 2) with anterior arms broadly fused medially, and widely divergent anteriorly; posterior tentorial bridge weakly curved anteriorly, without median process.

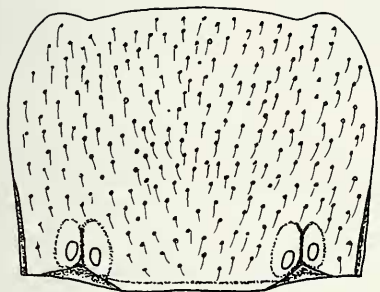
Pronotum (Fig. 12) transverse, very narrowly bordered laterally; basal sulcus rather distinct, with double, oval, deep cavities on its sides; each cavity with small, oval pit. Anterior angles weakly produced, rounded; posterior angles right. Pronotal disc weakly convex. Prosternum with two round, precoxal pits; intercoxal process (Fig. 13) narrow, flat, rounded apically; distinctly separates procoxae, extends posteriorly beyond them. Procoxa circular in outline (Fig. 19), its cavity externally open, internally closed. Trochantin concealed.

Mesosternum (Fig. 14) heavily sclerotized, with two, oval pits on sides, near anterior margin; with longitudinal ridge and concavities on its sides; intercoxal process narrow, less than half as broad as coxal diameter. Mesocoxa circular in outline, its cavity outwardly open; trochantin exposed. Meso-metasternal junction with internal knobs. Elytron (Fig. 17) elongate, convex, with rows of dark, coarse punctures; interspaces irregularly, finely punctured; epipleuron very narrow, incomplete apically. Scutellum small, transverse, weakly acute at apex.



FIGS 2-11

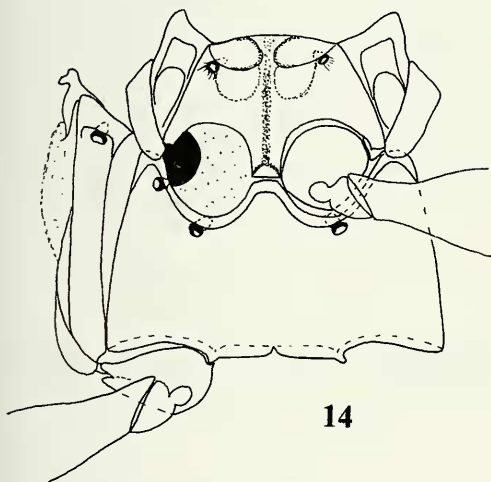
Danascelis elongata. 2, head, dorsal outline; 3, head, ventral outline; 4, labium, ventral; 5, maxilla, ventral; 6, labrum, ventral; 7, mandible, dorsal; 8, mandible, ventral; 9, male antenna, dorsal; 10, male antenna, ventral; 11, female antennal club.



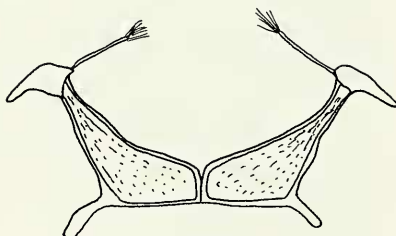
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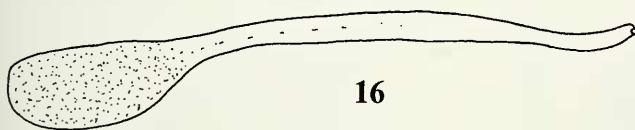
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FIGS 12-17

Danascelis elongata. 12, prothorax, dorsal; 13, prothorax, ventral; 14, pterothorax, ventral; 15, metendosternite, dorsal; 16, hind wing; 17, right elytron, dorsal.

Metasternum (Fig. 14) transverse, about 2 x as wide as long, weakly convex; with two pairs of postcoxal pits; medial line absent. Metacoxa transverse, broadly separated. Metapleuron with one, oval pit in its apical part. Metendosternite (Fig. 15) with short stalk and widely separated anterior arms and tendons.

Wing (Fig. 16) strongly reduced.

Leg with trochanterofemoral attachment oblique (Figs 14, 19); femur swollen, excavate mesally to receive tibia; tibia subcylindrical, about half as broad as femur; without apical spurs. Tarsal formula 4-4-4 in both sexes; tarsomeres 1 and 2 weakly flattened (Fig. 23), subequal in size; tarsomere 3 slightly shorter than 1 or 2, apical tarsomere longer than remaining together. Claws simple. Empodium small, bisetose.

Abdomen (Fig. 18) with five freely articulated ventrites; ventrite 1 longer than three following together, with two, oval, postcoxal pits; ventrites 2-4 subequal in length. Ventrites 2-5 with internal, anterolateral apodemes. 9 abdominal segment of male weakly sclerotized (Figs 21, 22). Aedeagus (Fig. 20) with median lobe rather stout, comparatively short, sclerotized, curved, resting on its side when retracted, with membranous gonopore at apex; tegmen very small, strongly reduced, ring-shaped; tegminal plate submembranous; tegminal strut short, membranous. Female genitalia (Fig. 24) with ovipositor short, weakly sclerotized; coxities moderately large, separated, elongate, densely setose at apex; styli reduced, very small, placed apically. Spermatheca small, oval, membranous; sperm duct short, slender; accessory gland very small, oval, membranous.

Type species. *Danascelis elongata* sp. n.

Etymology. The generic name is an arbitrary combination of letters referring to the genera Danae and Tragoscelis, which seem to be close related with a new genus; the gender is feminine.

Danascelis elongata sp. n.

DESCRIPTION. Length 2.55-2.80 mm. Body 1.95-2.30 x longer than wide; pronotum 0.60-0.80 x as long as wide; elytra 1.19-1.28 x wider than pronotum, 2.80-3.00 x longer than pronotum.

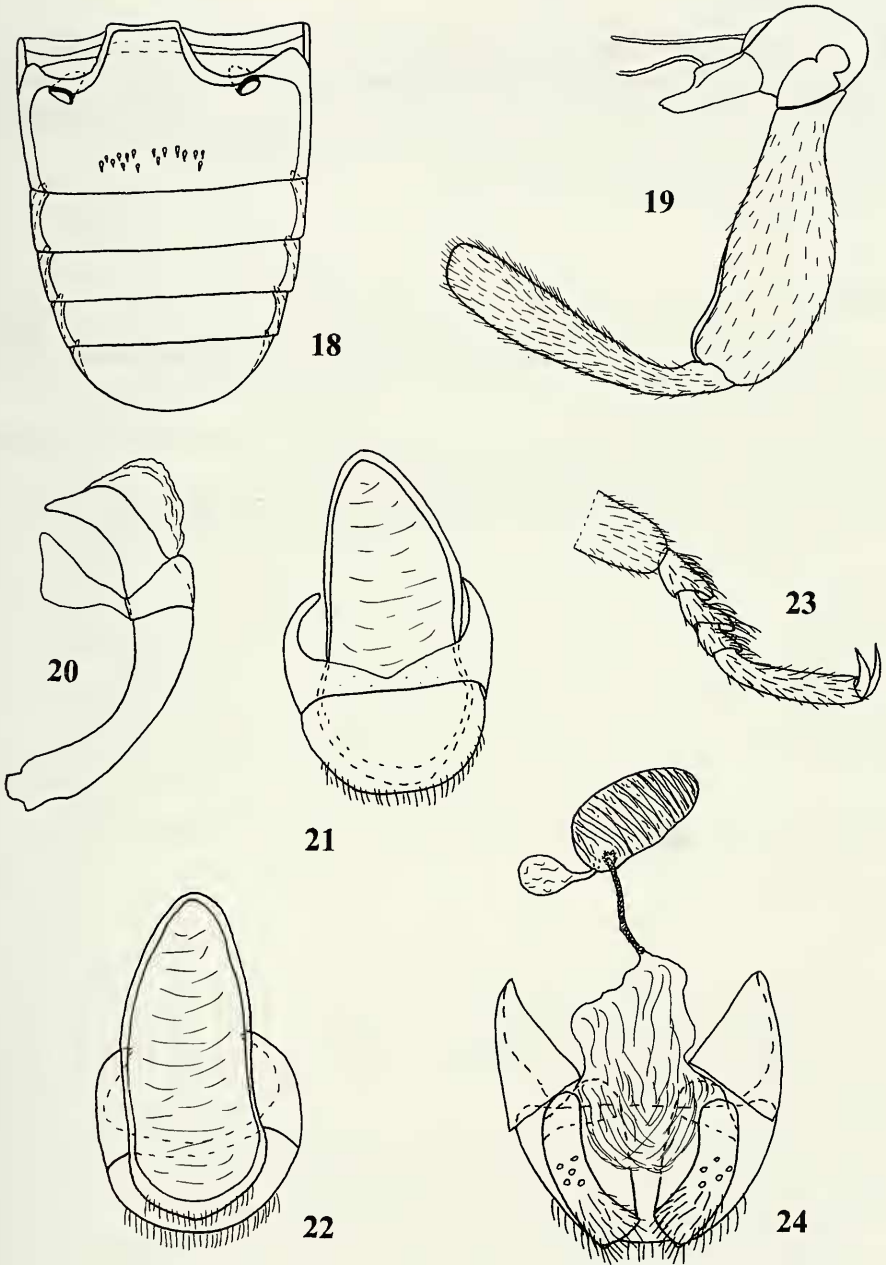
Colour light brown or brown with dorsal surface of head and edges of pronotum, and scutellum darker; eyes black. Vestiture of fine, short, pale yellow hairs. Pronotum widest at anterior third; edges smooth. Pronotal punctures fine, sparse and irregular. Elytra widest in about apical third, rounded at apex. Aedeagus as in Fig. 20.

Types. Holotype (male): PAKISTAN: Swat s/Utrot; 13.V.1983, 2500-2600 m, BESUCHET - LÖBL (MNHG).

Paratypes: PAKISTAN: Dir Lawarai Pass, 2700 m; 21.V.1983, BESUCHET - LÖBL (1 female, MNHG); same data (1 male, MZPW, completely dissected on slide).

One paratype is kept in the collection of the Museum and Institute of Zoology, Warszawa (MZPW).

Etymology. The name *elongata* is from the Latin referring to the elongate body.



FIGS 18-24

Danascelis elongata. 18, abdomen, ventral; 19, right fore leg (without tarsus); 20, aedeagus, ventral; 21, ninth abdominal segment of male, dorsal; 22, ninth abdominal segment of male, ventral; 23, apex of mid tibia and tarsus; 24, female genitalia, ventral.

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REFERENCES

- LAWRENCE, J.F. & A.F. NEWTON. 1995. Families and subfamilies of Coleoptera (with selected genera, notes, references and data on family-group names), pp. 779-1006. In: Pakaluk J., Šlipiński, S.A. (Eds.). Biology, phylogeny and classification of Coleoptera: Papers celebrating the 80th Birthday of Roy A. Crowson. Volume 2, *Muzeum i Instytut Zoologii PAN, Warszawa*.
- STROHECKER, H.F. 1953. Coleoptera Fam. Endomychidae. In: Wytzman P. (ed.), Genera Insectorum. *Desmet-Verneuil, Bruxelles*, 140 pp., 5 pls.
- ŠLIPÍŇSKI, S.A. & J. PAKALUK. 1992. Problems in the classification of the cerylonid series of Cucujoidea (Coleoptera). *Advances in Coleopterology, Barcelona*, pp. 79-88, 3 figs.